

THE CLAIMS

A complete listing of all of originally filed Claims 1 – 45 is provided below. A status identifier is provided for each claim in a parenthetical expression following each claim number.

1. (Currently Amended) A method comprising:

receiving a request to send an email;

determining whether the email to be sent includes one or more attachments;

determining whether a recipient of the email, in a peer-to-peer communication system, has distributed storage separate from an incoming email server of the recipient for storing email attachments, if the email to be sent includes one or more attachments;

determining a network address of the recipient's distributed storage for storing email attachments, if the recipient has such distributed storage;

determining whether the recipient's distributed storage is available to receive the one or more attachments upon determining the network address; and

servicing said request to send said email based at least in part on the results of said determinations.

2. (Original) The method of claim 1, wherein said determining of whether the recipient of the email has distributed storage separate from an incoming email server of the recipient for storing email attachments comprises querying a recipient email distributed storage location server.

3. (Original) The method of claim 1, wherein said determining of the network address of the recipient's distributed storage for storing email attachments comprises querying a recipient email distributed storage location server.

4. (Original) The method of claim 1, wherein said determining of whether the recipient's distributed storage is available to receive the one or more attachments comprises pinging the recipient's email distributed storage using said determined network address.

5. (Original) The method of claim 1, wherein said determination results based servicing comprises sending a main body of the email to the incoming email server of the recipient, and sending the one or more attachments of the email to the recipient's distributed storage for storing email attachments, if the recipient has distributed storage for storing email attachments, and the distributed storage is available to accept said one or more attachments.

6. (Original) The method of claim 1, wherein said determination results based servicing comprises sending a main body of the email to the incoming email server of the recipient, and sending an instruction to the recipient's distributed storage to submit a request for the one or more attachments of the email, if the recipient has distributed storage for storing email attachments, and the distributed storage is available to accept said one or more attachments.

7. (Original) The method of claim 6, wherein the method further comprises sending the one or more attachments of the email to the recipient's distributed storage for email attachments upon receipt of a request from the recipient's distributed storage for the one or more attachments of the email.

8. (Original) The method of claim 1, wherein said determination results based servicing comprises sending a main body of the email to the incoming email server of the recipient, and retrying to send the one or more attachments of the email to the recipients distributed storage in accordance with a retry policy, if the recipient has distributed storage and the distributed storage is not immediately available to accept said one or more attachments.

9. (Original) The method of claim 1, wherein said determination results based servicing comprises sending a main body of the email and the one or more attachments of the email to the incoming email server of the recipient if the recipient has distributed storage and the distributed storage is not available to accept said one or more attachments.

10. (Original) The method of claim 1, wherein said determination results based servicing comprises sending a main body of the email and the one or more attachments of the email to the incoming email server of the recipient if the recipient does not have distributed storage for email attachments.

11. (Original) The method of claim 1, wherein said method further comprises repeating said determining and determination results based servicing operations for each recipient of the email.

12. (Original) The method of claim 11, wherein said method further comprises determining recipients of the email, including determining members of a recipient group.

13. (Currently Amended) A method comprising:
receiving an email on behalf of a recipient in a peer-to-peer communications system, the email including a main body and one or more attachments;
determining whether the recipient of the email has distributed storage for storing email attachments;
determining a network address of the recipient's distributed storage for storing email attachments, if the recipient has such distributed storage;
determining periodically whether the recipient's distributed storage is available to receive the one or more attachments upon determining the network address; and
sending the one or more attachments of the email to the recipient's distributed storage for email attachments for storage, upon determining that the recipient's distributed storage for email attachments is available to accept email attachments.

14. (Original) The method of claim 13, wherein said determining of whether the recipient of the email has distributed storage for storing email attachments comprises querying a recipient email distributed storage location server.

15. (Original) The method of claim 13, wherein said determining of the network address of the recipient's distributed storage for storing email attachments comprises querying a recipient email distributed storage location server.

16. (Original) The method of claim 13, wherein said determining of whether the recipient's distributed storage is available to receive the one or more attachments comprises pinging the recipient's email distributed storage using said determined network address.

17. (Original) The method of claim 13, wherein said sending of the one or more attachments of the email to the recipient's distributed storage for email attachments comprises sending an instruction to the recipient's distributed storage to submit a request for the one or more attachments of the email.

18. (Original) The method of claim 17, wherein the method further comprises sending the one or more attachments of the email to the recipient's distributed storage for email attachments upon receipt of a request from the recipient's distributed storage for the one or more attachments of the email.

19. (Currently Amended) A method₁ comprising:
receiving a registration to register an email user's distributed storage for email attachments in a peer-to-peer communication system;

storing a network address of the email ~~users~~ user's distributed storage for email attachments;

receiving a request from a requestor for the network address of the email user's distributed storage for email attachments; and

providing the requestor with the network address of the email user's distributed storage for email attachments.

20. (Original) The method of claim 19, wherein the requestor is a selected one of a sender of an email and an incoming email server of a recipient of an email.

21. (Currently Amended) A method comprising:
receiving, in a peer-to-peer communication system, a request from a selected one of a sender and an incoming email server of a user to pull an attachment of an email;

in response, submitting a request to the selected one of the sender and the incoming email server of the user to pull said email attachment;

receiving said email attachment; and

storing said email attachment.

22. (Original) The method of claim 21, wherein the method further comprises:

receiving a request from a requestor for the email attachment;

retrieving the email attachment from storage; and

providing the retrieved email attachment to the requestor upon successfully retrieving said email attachment from storage.

23. (Currently Amended) A method comprising:

receiving a request from a user, a peer-to-peer communication system, to access an attachment of an email;

determining whether a distributed storage for storing email attachments for the user is accessible;

determining whether the attachment is stored in said distributed storage if said distributed storage is accessible; and

servicing said request to access said attachment of said email based at least in part on the result of said determination.

24. (Original) The method of claim 23, wherein said determining of whether the user's distributed storage for email attachments is accessible comprises pinging the user's distributed storage for email attachments.

25. (Original) The method of claim 23, wherein said determination results based servicing comprises retrieving the attachment from the user's distributed storage for storing email attachments if the user's distributed storage for storing email attachments is accessible, and the attachment is stored in the users distributed storage for storing email attachments.

26. (Original) The method of claim 23, wherein said determination results based servicing comprises retrieving the attachment from an incoming email server of the user if the user's distributed storage for storing email attachments is accessible, and the attachment is not stored in the users distributed storage for storing email attachments.

27. (Original) The method of claim 23, wherein said determination results based servicing comprises attempting to retrieve the attachment from an incoming email server of the user if the users distributed storage for storing email attachments is not accessible.

28. (Currently Amended) An apparatus comprising:
storage medium having stored therein a plurality of programming instructions designed to enable said apparatus to
receive a request to send an email to a recipient in a peer-to-peer communication system,
determine whether the email to be sent includes one or more attachments,
determine whether a the recipient of the email has distributed storage separate from an incoming email server of the recipient for storing email attachments, if the email to be sent includes one or more attachments,
determine a network address of the recipient's distributed storage for storing email attachments, if the recipient has such distributed storage,
determine whether the recipient's distributed storage is available to receive the one or more attachments upon determining the network address, and

service said request to send said email based at least in part on the results of said determinations; and

a processor coupled to the storage medium to execute the programming instructions.

29. (Original) The apparatus of claim 28, wherein said programming instructions are designed to enable the apparatus to send the one or more attachments of the email to the recipient's distributed storage, if the recipient has distributed storage for storing email attachments, and the distributed storage is available to accept said one or more attachments.

30. (Original) The apparatus of claim 28, wherein said programming instructions are designed to enable the apparatus to send an instruction to the recipient's distributed storage to submit a request for the one or more attachments of the email, if the recipient has distributed storage for storing email attachments, and the distributed storage is available to accept said one or more attachments.

31. (Original) The apparatus of claim 30, wherein said programming instructions are further designed to enable the apparatus to send the one or more attachments of the email to the recipient's distributed storage for email attachments upon receipt of a request from the recipient's distributed storage for the one or more attachments of the email.

32. (Original) The apparatus of claim 28, wherein said programming instructions are designed to enable the apparatus to retry to send the one or more attachments of the email to the recipient's distributed storage in accordance with a retry policy, if the recipient has distributed storage and the distributed storage is not immediately available to accept said one or more attachments.

33. (Original) The apparatus of claim 28, wherein said programming instructions are designed to enable the apparatus to send the one or more attachments of the email to the incoming email server of the recipient if the recipient has distributed storage and the distributed storage is not available to accept said one or more attachments.

34. (Original) The apparatus of claim 28, wherein said programming instructions are designed to enable the apparatus to send the one or more attachments of the email to the incoming email server of the recipient if the recipient does not have distributed storage for email attachments.

35. (Currently Amended) An apparatus comprising:
storage medium having stored therein a plurality of programming instructions designed to enable said apparatus to, in a peer-to-peer communication system to:
receive an email on behalf of a recipient, the email including a main body and one or more attachments,
determine whether the recipient of the email has distributed storage for storing email attachments,

determine a network address of the recipient's distributed storage for storing email attachments, if the recipient has such distributed storage,

determine periodically whether the recipient's distributed storage is available to receive the one or more attachments upon determining the network address, and

send the one or more attachments of the email to the recipient's distributed storage for email attachments for storage, upon determining that the recipient's distributed storage for email attachments is available to accept email attachments; and

a processor coupled to the storage medium to execute the programming instructions.

36. (Original) The apparatus of claim 35, wherein said programming instructions are designed to enable the apparatus to send an instruction to the recipient's distributed storage for email attachments, instructing the recipient's distributed storage for email attachments to submit a request for the one or more attachments of the email.

37. (Original) The apparatus of claim 36, wherein said programming instructions are further designed to enable the apparatus to send the one or more attachments of the email to the recipient's distributed storage for email attachments upon receipt of a request from the recipient's distributed storage for the one or more attachments of the email.

38. (Currently Amended) An apparatus comprising:

storage medium having stored therein a plurality of programming instructions designed to enable said apparatus, in a peer-to-peer communication system, to:

receive a registration to register an email user's distributed storage for email attachments,

store a network address of the email user's distributed storage for email attachments,

receive a request from a requestor for the network address of the email user's distributed storage for email attachments, and

provide the requestor with the network address of the email user's distributed storage for email attachments; and

a processor coupled to the storage medium to execute the programming instructions.

39. (Currently Amended) An apparatus comprising:

storage medium having stored therein a plurality of programming instructions designed to enable said apparatus, in a peer-to-peer communication system, to:

receive a request from a selected one of a sender and an incoming email server of a user to pull an attachment of an email,

submit, in response, a request to the selected one of the sender and the incoming email server of the user to pull said email attachment,

receive said email attachment, and

store said email attachment; and

a processor coupled to the storage medium to execute the programming instructions.

40. (Original) The apparatus of claim 39, wherein the programming instructions further enable the apparatus to

receive a request from a requestor for the email attachment;

retrieve the email attachment from storage; and

provide the retrieved email attachment to the requestor upon successfully retrieving said email attachment from storage.

41. (Currently Amended) An apparatus comprising:

storage medium having stored therein a plurality of programming instructions designed to enable said apparatus, in a peer-to-peer communication system, to:

receive a request from a user to access an attachment of an email,

determine whether a distributed storage for storing email attachments for the user is accessible,

determine whether the attachment is stored in said distributed storage if said distributed storage is accessible, and

service said request to access said attachment of said email based at least in part on the result of said determination; and

a processor coupled to the storage medium to execute the programming instructions.

42. (Original) The apparatus of claim 41, wherein the programming instructions enable the apparatus to perform said determining of whether the user's distributed storage for email attachments is accessible by pinging the user's distributed storage for email attachments.

43. (Original) The apparatus of claim 41, wherein the programming instructions enable the apparatus to perform said determination results based servicing by retrieving the attachment from the user's distributed storage for storing email attachments if the user's distributed storage for storing email attachments is accessible, and the attachment is stored in the user's distributed storage for storing email attachments.

44. (Original) The apparatus of claim 41, wherein the programming instructions enable the apparatus to perform said determination results based servicing by retrieving the attachment from an incoming email server of the user if the user's distributed storage for storing email attachments is accessible, and the attachment is not stored in the user's distributed storage for storing email attachments.

45. (Original) The apparatus of claim 41, wherein the programming instructions enable the apparatus to perform said determination results based servicing by attempting to retrieve the attachment from an incoming email server of the user if the user's distributed storage for storing email attachments is not accessible.